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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/828,271

04/05/2001

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5693p286

6350

48102 7590 03/20/2008
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EXAMINER

VO, LILIAN

ART UNIT

PAPER NUMBER

2195

MAIL DATE

DELIVERY MODE

03/20/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/828,271	Applicant(s) RAJAN ET AL.	
	Examiner LILIAN VO	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 12, 14, 16, 23 and 30 - 36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 12, 14, 16, 23 and 30 - 36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 11, 12, 14, 16, 23 and 30 - 36 are pending. Claims 1 – 10, 13, 15, 17 – 22 and 24 - 29 have been cancelled.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 11, 12 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claims 11, 12 and 23 recite the limitation "the identity of the processor". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11, 12, 14, 16, 23 and 30 - 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilner et al. (US 7,213,247, hereinafter Wilner) in view of Powell et al (“Process migration in Demos/MP”, hereinafter Powell).

7. Regarding **claim 11**, Wilner discloses a method comprising:
running a plurality of tasks in a system (fig. 4, col. 5 lines 4 - 7);
scheduling the plurality of tasks using a plurality of scheduling domains (col. 5 lines 4 – 7);
implicitly synchronizing the tasks with regard to one or more resources shared by the tasks in said system by associating said tasks with the scheduling domains, wherein each of the one or more resources is assigned to one of the scheduling domains (col. 5 lines 4 - 7);
prohibiting tasks that are each associated with a same scheduling domain from running concurrently (col. 5 lines 29 - 31);
allowing tasks that are each associated with different scheduling domains to run concurrently (col. 17 lines 30 - 35); and
changing association of a task of the plurality of tasks from a first scheduling domain to a second scheduling domain, if the task requests a shared resource assigned to the second scheduling domain (col. 15 lines 38 – 52, col. 16 lines 60 - 63).

Wilner did not disclose the system includes a plurality of processors. Nevertheless, Powell discloses the scheduling of plurality of tasks on a multiprocessor system (fig. 4-1, page 116 sect. 3.2). Therefore, it would have been obvious to one of an ordinary skill in the art at the time the invention was made to implement Wilner’s system with the multiprocessor system of

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Powell and still able to provide a protection model that prevents interference by malfunctioning and/or malicious tasks while maintaining high execution speeds, portability and system scalability as desired.

8. **Claim 12** is rejected on the same ground as stated in claim 11 above.

9. Regarding **claim 14**, as modified Wilner discloses at least one of the set of tasks is associated with more than one scheduling domain of the plurality of scheduling domains (Wilner: col. 5 lines 4 - 55)

10. Regarding **claim 16**, as modified Wilner discloses a scheduler includes a plurality of runnable queues one per scheduling domains (Wilner: col. 4 lines 56 – 65. Powell: page 115 left column paragraph 7).

11. **Claims 23 and 30** are rejected on the same ground as stated in claim 11 above.

12. Regarding **claim 31**, as modified Wilner discloses allowing concurrently executing processes that are not associated with any one of the plurality of scheduling domains (Wilner: col. 17 lines 30 - 35).

13. **Claims 32 - 36** are rejected on the same ground as stated in claims 11, 14, 16 and 31 above.

Response to Arguments

14. Applicant's arguments with respect to claims 11, 12, 23, 30 and 34 - 36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lilian Vo whose telephone number is 571-272-3774. The examiner can normally be reached on Thursday from 7:30am - 5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist at 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

Lilian Vo
Examiner
Art Unit 2195

lv
March 13, 2008